

Remarks

This is in response to the Office Action mailed on December 12, 2003. Favorable reconsideration is respectfully requested in view of the above amendments and the following remarks.

Non-elected claims 41-51 and 53-55 have been canceled. In addition, claims 32 and 52 have been canceled without prejudice. Applicants reserve the right to prosecute the canceled claims. Claims 15, 17, 29, 33, 35-38, and 40 have been amended. No new matter has been added. Claims 1-31 and 33-40 remain pending. Reconsideration and allowance of all claims are respectfully requested.

I. Restriction Requirement

Claims 41-51 and 53-55 were subjected to a restriction requirement and withdrawn from consideration. This restriction requirement is respectfully traversed.

However, in the interest of moving this application forward to allowance, claims 41-51 and 52-55 have been canceled and are being pursued in a divisional application.

II. Objections and Rejection Based on Defects in Oath

The reissue oath was objected to as being defective, and claims 1-40 and 52 were rejected under 35 U.S.C. § 251 as being based upon a defective reissue declaration. These objections and rejection are respectfully traversed.

A newly executed declaration is included herewith that addresses all of the defects identified in the objections and rejection. Reconsideration and removal of the objections and rejection are respectfully requested.

III. Double Patenting Rejections

Claims 1, 2, 4, 19, 20, 24-26, 28-33, 35-37, 40 and 52 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 14, 16, and 17 of U.S. Patent No. 5,996,575 (the "'575 patent"). In addition, claims 1, 19, 29, and 52 were rejected under the judicially created doctrine of obviousness-type double patenting as being

unpatentable over claims 1, 2, 9, 10, and 16 of U.S. Patent No. 6,170,481 (the "'481 patent"). Both of these rejections are respectfully traversed.

It is respectfully suggested that the rejection of the noted claims of the present application as not being patentably distinct from the claims of the '575 and '481 patents is improper because the present application has a priority date (January 19, 1996) that predates the priority dates of both the '575 patent and '481 patent. Since the present application has an earlier priority date, the reissue patent granted from the present application will therefore expire prior to either of the '575 and '481 patents. Consequently, it is respectfully submitted that there is no term of the reissue patent which will issue from the present application which will extend beyond the '575 and '481 patents to disclaim.

Further, the rejections state that specific claims of the present application are not patentably distinct from the '575 and '481 patents because it would have been obvious to one skilled in the art that the scope of the more broadly recited claims of the present invention would be encompassed within the scope of the more narrowly defined claims of the '575 and '481 patents. However, it is respectfully suggested that this is not the proper standard by which obviousness-type double patenting is determined.

An obviousness-type doubled patenting rejection is made based on the following inquiry: "[D]oes any claim in the application define an invention that is merely an obvious variation of an invention claimed in the patent?" MPEP § 804(II)(B)(1). Because this inquiry is analogous to an obviousness rejection under 35 U.S.C. § 103, it is proper to apply the factual inquiries identified in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), in deciding whether the claims of an application are an obvious variation of another application or patent. MPEP § 804(II)(B)(1). An obvious-type double patenting rejection should make clear (A) the differences between the conflicting claims; and (B) the reason why one skilled in the art would conclude that a claim at issue is an obvious variation of the claim in the other application or patent. *Id.*

In the obviousness-type double patenting rejections of the present application, the rejections do not provide any rationale (e.g., using the *Graham* factors) as to why the noted claims of the present application are merely an obvious variation of the claims of the '575 and '481 patents. Instead, the rejections simply state one skilled in the art would find it obvious that

the broader claims of the present application are encompassed within the more narrow claims of the '575 and '481 patents.

In addition, it is respectfully suggested that the logic of the rejections is flawed in that the rejections state that the broader claims of the present application would be "encompassed within" the scope of the more narrow claims of the '575 and '481 patents. However, if the claims of the present invention are broader than the claims of the '575 and '481 patents, it is not understood how the broader claims can be encompassed within the scope of the narrower claims.

Finally, assuming for argument purposes that the obviousness-type double patent rejections are properly stated, the noted claims of the present application are patentably distinct from the claims of the '575 and '481 patents because neither of these patents suggest the configurations recited by the noted claims of the present application.

For at least these reasons, reconsideration and removal of the rejections of claims 1, 2, 4, 19, 20, 24-26, 28-31, 33, 35-37, and 40 are respectfully requested.

IV. Rejections Based on Recapture

Claims 19-40 and 52 were rejected under 35 U.S.C. § 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. This rejection is respectfully traversed.

Claims 19 is noted as being allowed in the Office Action Summary and is not specifically addressed in the rejection. Therefore, it is assumed that claim 19 was inadvertently listed in the rejection and is therefore not subject to the recapture rejection.

Claims 20-31 and 33-40 are not subject to recapture because the claims are directed to inventions that are distinct from the inventions originally claimed in U.S. Patent No. 5,941,237 (the "reissue patent"). Specifically, apparatus claim 8 and dependents thereof of the reissue patent are directed to a combustion chamber including floor, top, and side panels each comprising vitreous alumina silicate fibers and binder formed and dried after molding to provide a gas tight box of panels of a combustion chamber. In other words, claim 8 of the reissue patent is directed to a combustion chamber comprising a plurality of panels (i.e., floor, top, and side panels) formed to provide a combustion chamber. *See, e.g.*, column 5, lines 51-56 of the present

application (which describes an embodiment in which the combustion chamber is formed using multiple pieces).

In contrast, claims 20-31 and 33-40 of the present application are directed to a one-piece combustion chamber, which is a distinct invention. In other words, claims 20-31 and 33-40 are directed to a combustion chamber that is formed as one piece, rather than as a plurality of separate panels that are joined together. *See, e.g.*, column 5, lines 57-60 of the present application (which describes an embodiment in which the combustion chamber is formed as a one piece unit).

For at least these reasons, claims 20-40 are not subject to recapture. Reconsideration and allowance are respectfully requested.

Claim 32 has been canceled without prejudice.

V. Claim Rejections Under 35 U.S.C. § 102

Claims 20, 21, 29, 30, 32, 37, 40, and 52 were rejected under 35 U.S.C. § 102(b) as being anticipated by Lamb et al., Great Britain Patent Application No. 2 236 315 A. This rejection is respectfully traversed, and reconsideration is requested in view of the following remarks.

Claim 20 is directed to a one piece combustion chamber comprising a mixture of refractory ceramic fibers and a binder. Claim 20 further recites that the one piece combustion chamber includes a floor panel, and a burner positioned relative to the floor panel to provide a flame within the combustion chamber.

A combustion chamber configured as recited in claim 20 can be advantageous, for example, because the one piece construction of the combustion chamber allows the combustion chamber to function without requiring an enclosure or shroud surrounding the chamber. *See, e.g.*, column 1, lines 34-37 of the present application (which notes that prior art chambers required additional structure surrounding the chamber to function).

Lamb discloses a liner (*see, e.g.*, page 1, line 15 of Lamb, describing "an improved fire back") for use in a fireplace. As shown, for example, in Figure 2 of Lamb, the ceramic fiber liner is not a combustion chamber, in that the liner does not include walls sufficient to form a chamber in which combustion can occur without additional structure surrounding the liner. Therefore, the liner disclosed in Lamb could not be used as its own combustion chamber. For

example, as shown in Figure 2, the liner disclosed in Lamb does not include a top panel. Further, Lamb states that the liner is typically fitted into an open fronted outer casing made of steel. Page 2, lines 24-26. Lamb cannot therefore function independently as a combustion chamber as recited by claim 20, but instead requires an outer casing of steel.

In addition, Lamb does not include a floor panel as recited by claim 20. The bottom 19 of Lamb identified in the rejection is not a floor panel, but instead is a simulated fuel support bed that is inclined upwardly and rearwardly. See Figure 2 and page 3, lines 15-25 of Lamb.

For at least these reasons, Lamb fails to anticipate claim 20, as well as claim 21 that depends therefrom. Reconsideration and allowance are respectfully requested.

Claim 29 is directed to a combustion chamber including floor, top, and at least two side panels. Claim 29 recites that the combustion chamber is molded to form a one piece combustion chamber molded of a mixture of refractory ceramic fibers and a binder, and therefore should be allowable for at least the same reasons as claim 20 noted above. In addition, Lamb fails to disclose a top panel (*see* Figure 2 of Lamb) as recited by claim 29.

For at least these reasons, claim 29, as well as claims 30, 37, and 40 that depend therefrom, should be allowable over Lamb. Reconsideration and allowance are solicited.

Claims 32 and 52 have been canceled without prejudice.

VI. Claim Rejections Under 35 U.S.C. § 103

Claims 20-40 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimek, U.S. Patent No. 4,793,322, in view of Lamb, Rex, Jr. et al., U.S. Patent No. 3,100,734, or Champion, 5,701,882. This rejection is respectfully traversed.

Shimek is directed to a direct-vented gas fireplace. As shown in Figure 2, Shimek discloses a combustion chamber 23 that is surrounded on three sides by refractory panels 24, 25, and 26. Shimek fails to disclose a one piece combustion chamber including refractory ceramic fibers as recited by claims 20 and 29, because the refractory panels 24, 25, and 26 do not form a combustion chamber and are not formed as one piece, but instead are separate panels.

Further, none of the additional art cited in the rejection suggests a one piece combustion chamber including refractory ceramic fibers as recited by claims 20 and 29. As noted above, Lamb simply discloses a liner and not a one-piece combustion chamber. Rex discloses a furnace

combustion chamber (*see* column 1, lines 23-28 of the present application for a general description of this type of firebox), and Champion discloses a fireplace with a ceramic fiber duct. Neither Rex nor Champion discloses or suggests a one piece combustion chamber as configured as recited by claims 20 and 29.

Reconsideration and allowance of claims 20 and 29, as well as claims 21-28, 30, 31, and 33-40 that depend therefrom, are respectfully requested.

Claim 32 has been canceled without prejudice.

VI. Conclusion

In view of the above amendments and remarks, all claims are in condition for allowance. Favorable reconsideration in the form of a Notice of Allowance is respectfully requested. Please contact the undersigned attorney with any questions regarding this application.

Respectfully submitted,
MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

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By: Matthew A. Doscotch
Name: Matthew A. Doscotch
Reg. No.: 48,957
MAD:RAK:pll